

A. CLASSIFICATION OF SUBJECT MATTER
IPC 7 H04L1/20 H04L1/18

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 H04L

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, WPI Data, PAJ, INSPEC

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	US 2002/053058 A1 (KYUNG CHAN HO ET AL) 2 May 2002 (2002-05-02) the whole document	1-12
A	US 5 657 325 A (LOU HUI LING ET AL) 12 August 1997 (1997-08-12) cited in the application the whole document	1-12



Further documents are listed in the continuation of box C.



Patent family members are listed in annex.

* Special categories of cited documents :

- *A* document defining the general state of the art which is not considered to be of particular relevance
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- *O* document referring to an oral disclosure, use, exhibition or other means
- *P* document published prior to the international filing date but later than the priority date claimed

- *T* later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
- *X* document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
- *Y* document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.
- *G* document member of the same patent family

Date of the actual completion of the international search

22 June 2004

Date of mailing of the international search report

06/07/2004

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Patent document cited in search report		Publication date	Patent family member(s)		Publication date
US 2002053058	A1	02-05-2002	KR	2002034226 A	09-05-2002
			CN	1351438 A	29-05-2002

US 5657325	A	12-08-1997	US	5689439 A	18-11-1997
			US	6157612 A	05-12-2000
			CA	2172320 A1	01-10-1996
			EP	0735701 A2	02-10-1996
			CA	2171998 A1	04-10-1996
			EP	0736979 A2	09-10-1996
			JP	8288934 A	01-11-1996
